UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
Region III
841 Chestnut Building
Philadelphia, PA 19107

SUBJECT: Request For Assistance from FIT Office Date: 2/19/92

From: Lorie Baker
Site Assessment Section (3HW13)

TDD# 92-22-3JZZ

To: Gregory Ham, FIT Regional Project Officer
Site Assessment Section (3HW13)

I. SITE NAME: Old Haecht and Foster (VA-592)
DSN

EPA ID NO. VAD988196994

II. LOCATION: _____

_____

III. WORK ASSIGNMENT:

____ Preliminary Assessment	____ Toxicology
____ EPI PA	____ Recon
____ Screening Site Inspection	____ Re-Sampling/Full Field Investigatio
____ Listing Site Inspection	✓ Peer Review Corrections/Finalize
____ Hazard Ranking System	____ Other (See VI below)

IV. PRIORITY

____ High(*) ✓ Medium ____ Low

V. PREFERRED DEADLINE:

Date: _____

VI. EXPLANATION OF TASK (* To include justification for high priority):

Finalize report with respect to attached comments. Comments are also forthcoming from the state. ~~I will send them when I receive them.~~ Attached

If there are any questions or disagreements concerning the above comments, please call the SIO listed above at 597-~~8888~~ 3165 prior to finalizing the report.

VII. To be completed by FIT RPO only:

Task complete date by FIT _____

Hours allocated _____

_____
RPO Concurrence

COMMONWEALTH of VIRGINIA

DEPARTMENT OF WASTE MANAGEMENT
11th Floor, Monroe Building
101 N. 14th Street
Richmond, VA 23219
(804) 225-2667
TDD (804) 371-8737

February 12, 1992

Lorie A. Baker
Site Assessment Section (3HW13)
U. S. EPA, Region III
841 Chestnut Building
Philadelphia, Pennsylvania 19107

Dear Lorie:

Below are my comments on the Old Hoechst and Foster Preliminary Assessment (VA-592):

In general the report was written well and was thorough. The geology and ground water sections were especially well written. However, I have a few comments regarding the format and the content of the report. The format did not resemble the format presented in the Guidance for Performing Preliminary Assessments Under CERCLA (September 1991). Specifically, I feel that the format would be better with the information presented by pathway, with the targets specifically delineated, and the conclusions explicitly enumerated.

1. On Figure 2, the map shows the site in the lower left-hand corner and fails to include the areas toward the south and the west. Is it possible to include a site diagram which presents at least a one mile radius?

2. Page 2, Section 2.2
The last sentence mentions "several small piles of debris..." but does not elaborate on this debris. What do these small piles of debris consist of?

3. Page 5, Section 2.5
Should the RCRA ID# read VAD86302866? yes fixed

4. Page 7, Section 3.1
The first sentence mentions the "study area". Since targets are being discussed here, the "study area" should be explicitly defined. Also, this

section states that "Portsmouth also maintains two wells, 600 to 800 feet deep, which are used only in times of drought". Are these wells located within the target distance limit? How often do drought conditions occur which require the use of these wells for drinking water? Finally, the section states that "there have been no problems with contamination in the past". Could this statement be elaborated?

5. Page 8, Section 3.2

Again, what is the "study area" being considered? Additionally, the section states that no "significantly-sized" wetlands are located within the 15-mile downstream distance. The topographic map shows wetland areas adjacent to the site and across the South Branch of the Elizabeth River. Have these wetlands been considered in this statement? Is the surface water in the area of the site tidally influenced and, if so, has this been taken into account when considering the 15-mile downstream distance?

6. Page 8, Section 3.3.1

Should paragraph 1, sentence 2 read, "The outer Coastal Plain in the region is characterized *by* ..."

7. Page 13, Section 3.3.3

Paragraph 4, sentence 5 mentions 6 wells in Chesapeake. Are these wells located within the ground water target distance limit and are they used for drinking water?

8. Page 15, Section 3.7

What is the reference for the statements regarding the presence of endangered species?

9. Page 16, Section 4.0

Are the constituents of the D001 (ignitable) waste known? Should "Old Over" actually read Oldover?

10. What is the distance to the nearest residence? How many workers, if any, are currently employed at the site?

Again, the report is generally a sound one. I hope that my comments can be of use in enhancing the overall quality of the report. If I can be of further assistance, feel free to call upon me at (804) 371-6037.

J. Darren Renne

J. Darren Renne

Environmental Program Analyst
Superfund Section

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION III
841 Chestnut Building
Philadelphia, Pennsylvania 19107

SUBJECT: Comments on the Draft PA Report for Old Hoechst and Foster Site (VA-592)

DATE: 2-7-92

FROM: Lorie A. Baker, SAM
Site Assessment Section

TO: Greg Ham, ARCS WAM
Site Assessment Section

Below are my comments on the draft preliminary assessment report for Old Hoechst and Foster:

1. The reason this site was identified was a possible point discharge from the bank to the south of the plant into the Elizabeth River. Was this area looked at during the PA site visit?

2. Page 8, Paragraph 3
From looking at a topo map, it appears as though there are wetlands adjacent and downstream from the site. Even though they aren't significantly-sized the wetland frontage should be totaled for both sides of the river.

make wetlands if consistant

3. Page 11, Section 3.3.2
Paragraph 2
This paragraph supports the existence of wetlands along both banks of the river.

Paragraph 4
Even though the Great Dismal swamp appears to be upgradient from the site, if it's close enough it would be considered a potential target for an air release and so it should also be mentioned in Section 3.2 or 3.7.

find out

4. Page 14, Paragraph 1
This paragraph mentions a well at Tidewater Community College. Is this a potable well? NO GREENHOUSE USE ONLY

5. Page 16
Paragraph 3, Line 2&3
Oldover should be one word.

6. Were photographs taken during the site visit? These should be in the report.

PA SCORE - PA FORM

7. The Street address of EPA should be 841 Chestnut

8. Page 3 - Waste Characteristics Information
I think the retention pond should be used as a potential source. If spills or anything have occured onsite, the contaminants would run off into the pond which is then discharged into the Elizabeth River. Maybe this was the discharge noted in the EPIC photographs. The volume of the retention pond could be used for waste quantity. This will have some effects on the PAscore, but very minor.

If you have any questions on the above comments, please feel free to call me at (215) 597-3165.

TETRA TECH INC.
F.I.T. SITE HEALTH & SAFETY PLAN

Prepared by: David E. Neidigh Date of Field Activity: 12/19/91 to ~~12/19/91~~ 12-31-91 DEN

OHSR Approval: _____ OR RHSR Approval: Douglas Jamison

EPA #: VAD 086 302 866

Site Name: OLD Hoechst & Foster Site EPA SI Number: TCN-

Original Safety Plan: Yes (X) No ( ) PA (X) SI ( )

Address: Street: 5100 Bainbridge Blvd

City: Chesapeake County: _____

State: VA Zip Code: 23320

Site Contact: Van H. White Site Phone #: 804-494-2740

Directions to Site: From I84 exit to I464 North. Left onto US 13/US 460. Exit 166 South

Key Tetra Tech Personnel	Responsibilities On-Site
Project Manager: Philip Younis	Coordinate office w/ Field Team
Site Manager: Cheryl Scanlon	Coordinate & manage field activities
Site Safety Officer: Mark McFarlan	air monitoring / H&S activities
EPA SIO: Lori Baker	
Subcontractor:	
Other:	

Site Description

Reason For Investigation: 1985 aerial photograph indentified possible Discharge at the edge of a Lagoon Near a channel in the wetland

Site History Summary: ~~EPADW~~ The site is being used by active Chemical manufacturer. Polymerize Styrene into Polystyrene.

Background Information Sources: EPA potential hazardous waste site identification and Preliminary assessment.

Background Material Attached: Yes ( ) No (X)

Site Map Attached: Yes (X) No ( )

Status:

Active	(X)	Inactive	( )	Unknown	( )

Location:

Urban	( )	Residential	( )	Landfill	( )
Suburban	(X)	Commercial	( )	Dump	( )
Rural	( )	Industrial	(X)	Deserted	( )

Physical Features:

Flat	(X)	Barren	( )	Streams	(X) Deep Creek	Ponds	( )
Hilly	( )	Fielded	( )	Rivers	(X) Elizabeth River	Lakes	( )
Sloped	( )	Shrub/brush	( )	Coastal	( )	Lagoons	( )
Mountainous	( )	Wooded	( )	Estuaries	( )	Dams	( )
				Marsh	(X)		

INSERT SITE SKETCH HERE
(if available)

PLEASE REMOVE THIS SHEET

Containers/Structures Involved:

Yes ~~(X)~~ No ( ) Unknown ( )

Drums: (X) Number Unknown Condition: Good ( ) Poor ( ) Deteriorated ( ) Unknown (X)

UST: ( ) Number Unknown Condition: Good ( ) Poor ( ) Deteriorated ( ) Unknown (X)
Total of 8 tanks

AST: ( ) Number Unknown Condition: Good ( ) Poor ( ) Deteriorated ( ) Unknown (X)

Warehouses: ( ) Number ____ Condition: Good ( ) Poor ( ) Deteriorated ( ) Unknown ( )

Laboratories: ( ) Number ____ Condition: Good ( ) Poor ( ) Deteriorated ( ) Unknown ( )

Others: _____ ( ) Number ____ Condition: Good ( ) Poor ( ) Deteriorated ( ) Unknown ( )

Task To Be Performed:

Geophysical Monitoring	( )	Well Installation	( )
Drum Sampling	( )	Lagoon Sampling	( )
Surface Water Sampling	( )	Sediment Sampling	( )
Air Sampling	( )	Well Sampling	( )
Soil Sampling	( )	Bulk Sampling	( )
Tank Sampling	( )	Biota Sampling	( )
Walk Through Assessment	(X)	Other: _____	( )

Task/Operation Health & Safety Risk Analysis:

HAZARD	MEDIA/MAXIMUM KNOWN CONCENTRATION/HAZARD DESCRIPTION				
Chemical	Soil (ug/kg)	Surface Water (ug/L)	Groundwater (ug/L)	Air (ppb or mg/m³)	Sediment (ug/kg)
1. 1,1,1 Trichloroethane			Unknown		
2. Mineral Spirits					
3. Styrene					
4. Xylene					
5. Cumene					
6. N-Propylbenzene					
7. Ethylbenzene					
8. hydrocarbons					
9.					
10.					

Used on Site
Concentrations

Biological	Expected Location/Hazard Description
1.	Unknown
2.	
3.	
4.	
5.	

Physical	
1. Cold	) Seasonal Conditions
2. Snow	
3. Rain	
4. Buildings	Building entry
5.	
6.	
7.	
8.	
9.	
10.	

Chemical Hazard Analysis:

TASK TO BE PERFORMED	HAZARD	HAZARD RATING	SPECIAL MONITORING INSTRUMENTS
Task #1: Site Walkthrough	Chemical Possible Organics Biological Unknown Physical Unknown	Low ( ) Medium (X) High ( )	1. PID 2. 3. 4.
Task #2:	Chemical Biological Physical	Low ( ) Medium ( ) High ( )	1. 2. 3. 4.
Task #3:	Chemical Biological Physical	Low ( ) Medium ( ) High ( )	1. 2. 3. 4.
Task #4:	Chemical Biological Physical	Low ( ) Medium ( ) High ( )	1. 2. 3. 4.

CHEMICAL HAZARD INFORMATION

CHEMICAL NAME	PEL/STEL/IDLH	ROUTE OF EXPOSURE	SYMPTOMS OF ACUTE EXPOSURE	CHEMICAL PROPERTIES	INCOMPATIBILITIES	SPECIAL MONITORING
Trichloroethane CAS # ~~79-00-5~~ 71-55-6	PEL-350 ppm STEL- ~~200 ppm~~ 450 ppm IDLH- 1000 ppm ~~CANCER~~	Ing ~~(X)~~ Inh ~~(X)~~ Abs ( ) Con ~~(X)~~ Inj ( )	Headache Lassitude CNS depress. Poor equilibrium Irritates Eyes Dermatitus ~~CANCER~~	Specific Gravity 1.34 Melting Point ___ °C Vapor Pressure 100 mm Ionization Potential 11 V Low. Flash Level (LFL) ___ °C Upper Flash Level (UFL) ___ °C Low. Expl. Level (LEL) 7.5 % Upper. Expl. Level (UEL) 12.5 % Flash Point NA °C Ignition Temperature ___ °C	Strong caustics Strong oxidizers Chemically active metal → Zinc Al, Magnesium Sodium Potassium Reacts w/ water to form HCL	PID ~~(X)~~ FID ( ) Monotox ( ) Rad M ( ) D. Tube ( ) Other ___ Other ___
Styrene CAS # ___ 100-42-5	PEL- 50 ppm STEL- 100 ppm IDLH- 5000 ppm	Ing ~~(X)~~ Inh ~~(X)~~ Abs ( ) Con ~~(X)~~ Inj ( )	Irritates Eyes Noses drowsyness Weak Unsteady gait Narcosis defatting Dermatitus	Specific Gravity 0.91 Melting Point ___ °C Vapor Pressure 5 mm Ionization Potential 8.4 V Low. Flash Level (LFL) ___ °C Upper Flash Level (UFL) ___ °C Low. Expl. Level (LEL) 1.1 % Upper. Expl. Level (UEL) 7.0 % Flash Point 88 °F Ignition Temperature ___ °C	Oxydizers Catalysts for Vinyl polymers Peroxides Strong Acids Alum. Cloride	PID ~~(X)~~ FID ( ) Monotox ( ) Rad M ( ) D. Tube ( ) Other ___ Other ___
~~Xylenes~~ CAS # ___ 1330-20-7	PEL- 100 ppm STEL- 150 ppm IDLH- 1000 ppm	Ing ~~(X)~~ Inh ~~(X)~~ Abs ~~(X)~~ Con ~~(X)~~ Inj ( )	Dizziness excitement drowiness incoherent staggering gait Irrit Eye, Nose Throat Nau. vomit Abdom Pain	Specific Gravity 0.86 - 0.88 Melting Point ___ °C Vapor Pressure 7-9 mm Ionization Potential ~~8.44~~ 8.56 V Low. Flash Level (LFL) ___ °C Upper Flash Level (UFL) ___ °C Low. Expl. Level (LEL) 1.0 % Upper. Expl. Level (UEL) 7.0 % Flash Point 63-81 °F Ignition Temperature ___ °C	Strong Oxidizers	PID ~~(X)~~ FID ( ) Monotox ( ) Rad M ( ) D. Tube ( ) Other ___ Other ___

CHEMICAL HAZARD INFORMATION

CHEMICAL NAME	PEL/STEL/IDLH	ROUTE OF EXPOSURE	SYMPTOMS OF ACUTE EXPOSURE	CHEMICAL PROPERTIES	INCOMPATIBILITIES	SPECIAL MONITORING
Cumene CAS # 98-82-8	PEL-50 ppm STEL- IDLH-8000ppm	Ing (X) Inh (X) Abs (X) Con (X) Inj ( )	Irritates Eyes mucusmembr. headache dermatitus Narcosis coma	Specific Gravity 0.86 Melting Point ___ °C Vapor Pressure 77°F 5 mm Ionization Potential 8.75 V Low. Flash Level (LFL) ___ °C Upper Flash Level (UFL) ___ °C Low. Expl. Level (LEL) 0.9 % Upper. Expl. Level (UEL) 6.5 % Flash Point ___ °C Ignition Temperature ___ °C	Oxidizers Class 1A Flammable Liq	PID (X) FID ( ) Monotox ( ) Rad M ( ) D. Tube ( ) Other ___ Other ___
Ethylbenzene CAS # 100-41-4	PEL-100ppm STEL-125ppm IDLH-2000ppm	Ing (X) Inh (X) Abs ( ) Con (X) Inj ( )	Asdew Same as Cumene	Specific Gravity 0.87 Melting Point ___ °C Vapor Pressure 79°F 10 mm Ionization Potential 8.76 V Low. Flash Level (LFL) ___ °C Upper Flash Level (UFL) ___ °C Low. Expl. Level (LEL) 1.0 % Upper. Expl. Level (UEL) 6.7 % Flash Point 55 °F Ignition Temperature ___ °C	Strong Oxidizers Class 1B Flam. Liq	PID (X) FID ( ) Monotox ( ) Rad M ( ) D. Tube ( ) Other ___ Other ___
___ CAS # ___	PEL- STEL- IDLH-	Ing ( ) Inh ( ) Abs ( ) Con ( ) Inj ( )		Specific Gravity ___ Melting Point ___ °C Vapor Pressure ___ mm Ionization Potential ___ V Low. Flash Level (LFL) ___ °C Upper Flash Level (UFL) ___ °C Low. Expl. Level (LEL) ___ % Upper. Expl. Level (UEL) ___ % Flash Point ___ °C Ignition Temperature ___ °C		PID ( ) FID ( ) Monotox ( ) Rad M ( ) D. Tube ( ) Other ___ Other ___

BIOLOGICAL HAZARD ANALYSIS

ANIMAL		Describe Hazard
ticks	( )	
chiggers	( )	
mosquitoes	( )	
bees	( )	
reptiles	( )	Unknown
small mammals	( )	
domestic pets	( )	
man	( )	

VEGETATION		Describe Hazard
Poison Ivy (Contact)	( )	
Dense Vegetation	( )	
Poison (Ingestion)	( )	Unknown
Dermal Abrasion	( )	
Visibility	( )	

BIOLOGICAL WASTE ( ) Describe Hazard in Detail

Unknown

Physical Hazard Analysis

Physical Hazard Of Concern	Hazard: Yes = (x)	Task No(s).	Comments
Noise	( )		
Heat - ambient air	( )		
- Hot Process - Steam	( )		
- Hot Process - Incineration	( )		
Cold	(X)	1	Seasonal
Rain	(X)	1	
Snow	(X)	1	
Electric Storms	( )		
Confined Space Entry (Attached Plan)	( )		
Heavy Manual Moving/Lifting	( )		
Rough Terrain	( )		
Unguarded Floor Openings/Lagoons	( )		
Building Entry	(X)	1	expected
Structural Integrity	( )		
Neighborhood	( )		
Remote Area	( )		
Compressed Gases	( )		
Using Boats	( )		
Working Over Water	( )		
Traffic	( )		
Explosives	( )		
Heavy Equipment Operations	( )		
Lifting Equipment Operations - Cranes	( )		
- Manlifts	( )		
Overhead Hazards	( )		
Working at Elevation	( )		
Using Ladders	( )		
Using Scaffolding	( )		
Excavating/Trenching	( )		
Materials Handling	( )		
Haz. Mat. Use/Storage - Flam.Liq./Gases	( )		
- Oxidizers	( )		
- Corrosives	( )		
Fire Extinguisher Required	( )		
Demolition	( )		
Utilities - Underground	( )		
- Overhead	( )		
Electrical - General	( )		
- High Voltage	( )		
Welding/Cutting/Burning	( )		
Hand Tools	( )		
Power Tools	( )		
High Pressure Water	( )		
Illumination	( )		
Other: _____	( )		
Other: _____	( )		

Site Control

Site Work Zone:

When applicable, the following work zones will be implemented.

The **Exclusion Zone** is the area where contamination is known or expected to be present, and has the potential to cause harm to personnel. Entry into the Exclusion Zone requires the use of personnel protective equipment and proper OSHA training.

The **Contamination Reduction Zone** is the buffer zone between the Exclusion Zone and Support Zone. Personal and equipment decontamination is conducted here. Minimal personal protection may be required in this zone, as per the HSP.

The **Support Zone** is located in areas that are considered clean and offer no site related risk to personnel. The Support Zone shall have a first-aid kit, potable water, and shelter from the environment. These shall be available at all times while personnel are working on-site.

Work Zones Being Used: Yes ( ) No (X)
If No, Explain:
Walk Through Investigation, Zones Unknown

Work Zones Can be found on:

Site Map ( ) Sketch on Reverse Side of Page ( ) Not present (X)

Standard Operating Procedures:

- The buddy system is required for all site work. When using the buddy system visual contact must be maintained at all times.
- All personnel leaving the Exclusion Zone must undergo decontamination.
- All equipment leaving the Exclusion Zone must undergo decontamination or be disposed of in accordance with HSP.
- Hands must be washed prior to each entry into the support zone.
- Practice contamination avoidance.
- No eating, drinking, or smoking except in the designated support zone.
- Beards or excessive facial hair that interferes proper respirator seal are not allowed past the Support Zone.

- In the event PPE is damaged, work shall stop and PPE will be replaced.
- By alert of your awareness and physical condition; do not ignore possible exposure symptoms. If symptoms are suspect, notify the SSO.
- A designated vehicle will be available exclusively for emergency use.
- All areas which come in direct contact with contaminants shall be washed with soap and water immediately.
- The HSP shall be available at the command post or vehicle.
- Personnel should make and effort to remain upwind of contaminants.
- Do not climb over obstacles, and use safety harnesses when applicable.
- Daily Health & Safety meetings shall be required prior to commencement of work.
- Any modifications to this HSP must be approved by either the OHSR or RHSR.

Site Communication:

The following communication techniques shall be implemented:

2-Way Radios ( ) Air Horn ( ) Whistle ( )
Megaphone ( ) Hand Signals (X)

Signal	Definition
Hands Clutching Throat	Out of Air/Can Not Breath
Hands On Top of Head	Need Assistance
Thumbs Up	OK/I Understand
Thumbs Down	No/Negative
Arms Waving Upright	Send Backup Support
Grip Partners Wrist	Exit Area Immediately
Fist Raised Above Head	Stop Immediately

Personnel Protective Equipment

TASK No(s) 1	TASK No(s)	TASK No(s)
LEVEL D	LEVEL C	LEVEL B
Respiratory Protection Escape Pack (X)	**Respiratory Protection** Full Face APR ( ) Cartridge_____	**Respiratory Protection** SCBA ( ) Supplied Air Line w/ Escape ( ) Tether Line ( )
Head Protection Hard Hat (X) Hard Hat Liner ( ) Hearing Prot. ( ) Safety Glasses (X) Face Shield ( )	**Head Protection** Hard Hat ( ) Hard Hat Liner ( ) Hearing Prot. ( ) Safety Glasses ( ) Face Shield ( )	**Head Protection** Hard Hat ( ) Hard Hat Liner ( ) Hearing Prot. ( ) Safety Glasses ( ) Face Shield ( )
Clothing Cotton Coveralls( ) Domestic (X) Insulated ( ) Plain Tyvek ( ) Polycoated Tyvek( ) Saranex ( ) Baricade ( )	**Clothing** Cotton Coveralls( ) Domestic ( ) Insulated ( ) Plain Tyvek ( ) Polycoated Tyvek( ) Saranex ( ) Baricade ( )	**Clothing** Cotton Coveralls( ) Domestic ( ) Insulated ( ) Plain Tyvek ( ) Polycoated Tyvek( ) Saranex ( ) Baricade ( )
Additional Prot. Clothing Rain Gear (X) Splash Apron ( ) Safety Vest ( ) Other_____ ( )	**Additional Protective Clothing** Rain Gear ( ) Splash Apron ( ) Safety Vest ( ) Other_____ ( )	**Additional Prot. Clothing** Rain Gear ( ) Splash Apron ( ) Safety Vest ( ) Other ( )
Gloves Outer Inner Cotton ( ) ( ) Leather (X) ( ) PVA ( ) ( ) Rubber ( ) ( ) Nitrile ( ) ( ) Neoprene ( ) ( ) Butyl ( ) ( ) Viton ( ) ( ) Other ( ) ( )	**Gloves** Outer Inner Cotton ( ) ( ) Leather ( ) ( ) PVA ( ) ( ) Rubber ( ) ( ) Nitrile ( ) ( ) Neoprene ( ) ( ) Butyl ( ) ( ) Viton ( ) ( ) Other ( ) ( )	**Gloves** Outer Inner Cotton ( ) ( ) Leather ( ) ( ) PVA ( ) ( ) Rubber ( ) ( ) Nitrile ( ) ( ) Neoprene ( ) ( ) Butyl ( ) ( ) Viton ( ) ( ) Other ( ) ( )
Boots Outer Inner Leather Safety ( ) (X) Rubber (X) ( ) Fireman (Bunker)( ) ( ) Insulated ( ) ( ) Neoprene ( ) ( ) Hipwaders ( ) ( ) Other ( ) ( )	**Boots** Outer Inner Leather Safety ( ) ( ) Rubber ( ) ( ) Fireman (Bunker)( ) ( ) Insulated ( ) ( ) Neoprene ( ) ( ) Hipwaders ( ) ( ) Other ( ) ( )	**Boots** Outer Inner Leather Safety ( ) ( ) Rubber ( ) ( ) Fireman (Bunker)( ) ( ) Insulated ( ) ( ) Neoprene ( ) ( ) Hipwaders ( ) ( ) Other ( ) ( )

SAFETY EQUIPMENT/MONITORING INSTRUMENTS/DECONTAMINATION SUPPLIES

SAFETY EQUIPMENT	MONITORING EQUIPMENT	DECONTAMINATION EQUIP.
(X) Potable Water	(X) PID	(X) PPE Level D
( ) Gatorade	( ) FID	( ) PPe Level Mod. D
(X) First-Aid Kit	(X) CGI/O_2 Meter	( ) PPE Level C
(X) Eye Wash/Shower	( ) MiniRam	( ) PPE Level B
( ) Blow Horn	( ) RAM	( ) 55 gal. Drums
( ) 2-Way Radios	( ) Radiation Meter	( ) Hazard Labels
( ) Portable Phone	( ) Draeger Tubes _____	(X) Soap
(X) Flash Light	( ) Mercury Meter	(X) Spray Bottles
(X) Tool Kit	( ) CGI w/H_2S	( ) Spray Task
( ) Fire Estinguishers	( ) Cyanide Meter	( ) Steam Gun
( ) Safety Fencing	( ) CGI w/CO	( ) Brushes (Large)
( ) Traffic Cones	( ) Heat Stress Monitor	( ) Brushes (Medium)
( ) Caution Tape	( ) Noise Dosimeter	(X) Brushes (Small)
( ) Cascade Set-up	( ) Personal Sampler	(X) Brushes (Fine)
( ) Airline Hose	( ) Passive Air Badges	(X) Buckets
( ) Spare Breathing Air	( ) Weather Station	( ) Acetone
( ) Mech.Retrieval Sys.	( ) Other _____	( ) Methanol
( ) Safety Rope_____	( ) Other _____	( ) 10% Nitric Acid
( ) Safety Harness		(X) Paper Towels
( ) Cooling Vest		(X) Trash Bags
( ) Stretcher		( ) Other _____
( ) Sorbent Pillows		( ) Other _____
( ) Portable Blowers		
( ) Ladders		
( ) Other _____		
( ) Other		

Monitoring

All site monitoring is the responsibility of the SSO. All calibration of monitoring instruments will follow the recommended techniques given by the instrument manufacturer. All monitoring equipment calibration, malfunctions, and results will be documented in the field log book by the SSO.

Type of Monitoring:

Survey/Characterization (X) Perimeter ( )
Exposure/Breathing Zone (X) Work Zone ( )

Environmental:

Air monitoring shall be used to measure airborne levels of hazardous substances, in order to determine the appropriate levels of protection needed on-site. Prior to the commencement of field activities, air monitoring shall be performed to determine ambient background conditions using real-time monitoring instruments. Air monitoring shall be required during all field activities within or adjacent to the Exclusion Zone.

During field activities within the Exclusion Zone, daily and periodic air monitoring in the breathing zone shall be done to assess exposure levels and determine the appropriate level of protection needed. The frequency of the monitoring depends on the results obtained, with the maximum time interval between reading not exceeding 15 minutes. If readings indicate the presence of contaminants above background levels, continuous monitoring shall be conducted. Air monitoring shall be conducted each time a new area is entered.

Weather conditions, including temperature and wind direction, shall also be monitored as part of the background conditions. The weather conditions along with the results from the real-time monitoring shall be recorded in the site log book. The following table summarizes the decision criteria to upgrade and down grade based on the environmental monitoring results.

Personnel:

During all field activities personnel shall be monitored by the Tetra Tech SSO or designate for fatigue and thermal exposure. The primary method of monitoring shall be by direct observation of all personnel working on-site. If evidence of fatigue is present the SSO shall implement a work/rest regimen for the affected individual(s). If evidence of thermal exposure exists, the SSO shall modify the work/rest regimen, and if necessary, implement first aid as follows:

DECISION CRITERIA FOR UPGRADING OF PPE OR WORK STOPPAGE BASED ON ENVIRONMENTAL MONITORING RESULTS

Agent	Monitoring Instrument	Decision Level[1]	Required Protection
Radiation	Radiation Meter	< 1.0 mrem/hr	Modified Level D
		> 1.0 mrem/hr and < 10.0 mrem/hr	~~Level C~~ DEW Stop Work
		> 10.0 mrem/hr	STOP WORK
Organics (Volatile)	Photoionization Detector (PID) or Flame Ionization Detector (FID)	Background	Modified Level D
		1 ppm to 5 ppm above background	~~Level C~~ DEW Stop Work
		> 5 ppm	DEW ~~Level B~~, Stop Work
Dust[3] (Respirable)	Real-Time Aerosol Monitor[4] (RAM)	< 0.1 mg/m³	Modified Level D
		> 0.1 mg/m³ and < 0.5 mg/m³	~~Level C~~ DEW Stop Work
		≥ 0.5 mg/m³	DEW ~~Level B~~ Stop Work
Carbon Monoxide	Combustible Gas Indicator (CGI)	< 35 ppm	Modified Level D
		≥ 35 ppm	DEW ~~Level B~~ Stop Work
Hydrogen sulfide	CGI	< 10 ppm	Modified Level D
		≥ 10 ppm	DEW ~~Level B~~ Stop Work
Hydrogen cyanide	Toxic Gas Monitor	< 4 ppm	Modified Level D
		≥ 4 ppm	DEW ~~Level B~~ Stop Work
Mercury vapor	Mercury Meter	< 0.05 ppm	Modified Level D
		≥ 0.05 ppm	STOP WORK
Explosive Atmosphere	CGI	≥ 20% LEL	STOP WORK
Oxygen Concentration	CGI	≤ 19.5%	DEW ~~Level B~~, Stop Work

Notes:

1. Continuous readings in the breathing zone.
2. Before upgrading to Level B, all work shall stop and the SSO must be notified. Work cannot proceed in Level B without the SSO's prior approval.
3. The decision level is based on the PEL of Arsenic.
4. The SSO should record the TWA at the end of the day and also the SA at the end of each shift by pressing either the TWA or the SA key which will display the aerosol conentration. (SSO should also note the start and end time of each working shift.)

Decontamination Plan

Refer to the following figures for decontamination sequences.

Are personnel required to assist with decon: Yes ( ) No (X)
If yes, what level of protection is required for those assisting:
B ( ) C ( ) Modified D ( ) D (X)

(Note: All level B activities require assistance with decon.)

Disposition of Waste/Residuals Management

All residual sampling media, soiled PPE, and decontamination reinstate shall be handled as hazardous waste. All residual sampling media shall remain in the Exclusion Zone. The following describes the disposition of the residual material:
No Contaminated residuals expected. Non-Contaimenated residuals to be disposed of in Public dumpster

Contingency Planning

The following are to be located and identified during site orientation:

(X) First Aid Kit: Vehicle
(X) Eye Wash/Safety Shower: Vehicle
( ) Emergency Shower:
(X) Fire Extinguisher: Vehicle
( ) Public Phone:
( ) Site Phone:
( ) Two-Way Radio:
(X) Telephone Contact List: Vehicle
(X) Location of HSP: Vehicle
(X) Evacuation Routes: Vehicle

Directions to Hospital (attached map):
From I64 Exit 83B Which is Rt 168 South Hospital is at 5th traffic Light on the right.

Recognition/Alert/Evacuation:

An emergency is an unplanned event that threatens the safety of any personnel. All personnel, including subcontractors, must report emergencies to the Tetra Tech SSO and/or Site Manager (SM) immediately. Either the SM or SSO shall initiate the emergency response action. The SM or designate shall have the responsibility of contacting the local dispatch center during an emergency. Evacuation routes shall be established by work area locations. Each work area shall have two exit points. In the event of an evacuation, all personnel are to escape to a pre-planned rendezvous point, decontaminate to the maximum extent possible, and stay uphill and upwind at all times.

Medical Emergencies:

In cases of illness or injuries within the Exclusion Zone, the person must be decontaminated to the maximum extent possible. For serious illnesses or injuries, partial decontamination should be performed. First aid should be administered, by qualified individuals, while awaiting for an ambulance or paramedics.

Any person being transported to a medical facillity should take with them the site HSP and information on the chemical(s) they may have been exposed to on-site.

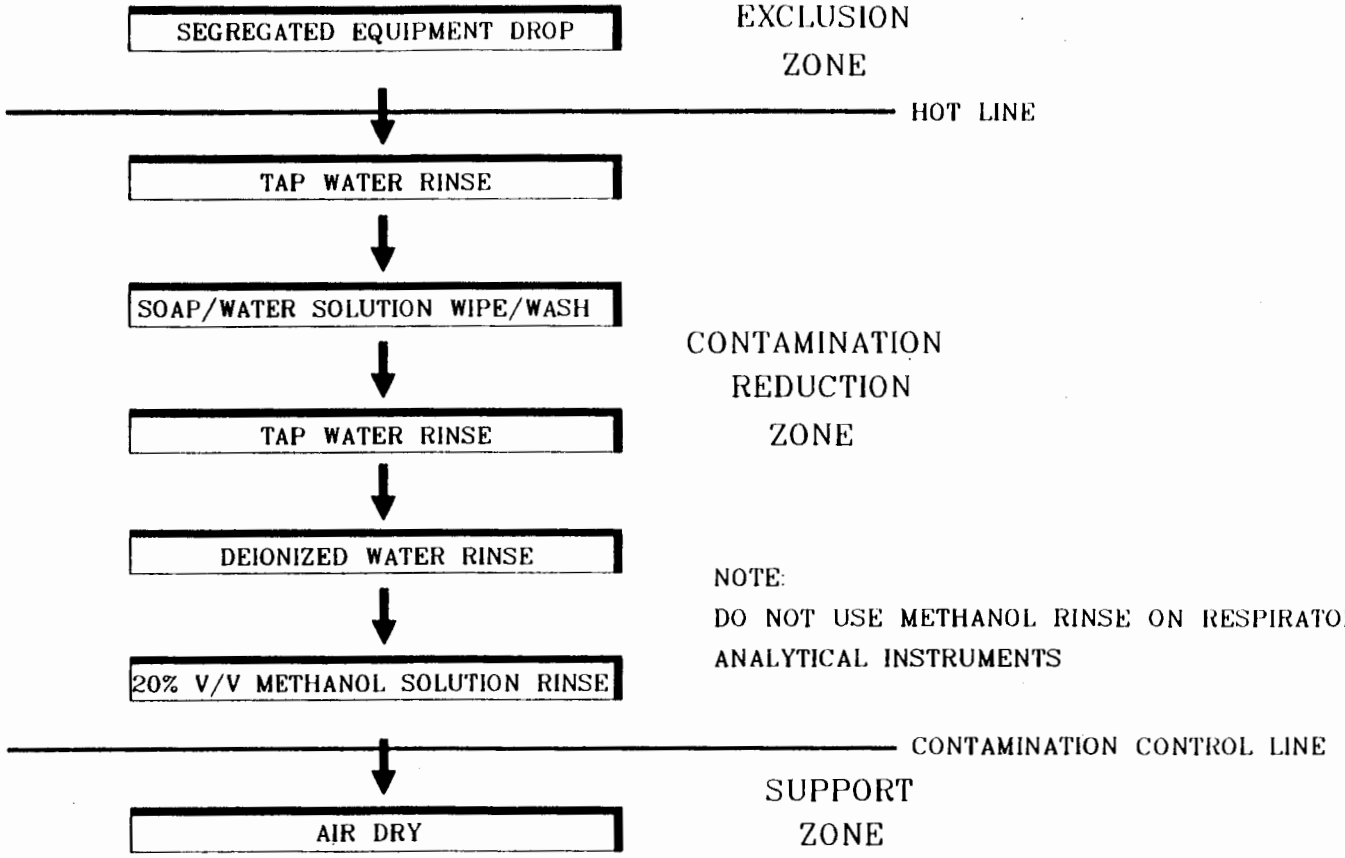
The following on-site personnel have current certifications:

Name	CPR	First Aid	EMT
Cheryl Scanlon	(X)	(X)	( )
_____	( )	( )	( )
_____	( )	( )	( )
_____	( )	( )	( )

Fire or Explosion:

In case of fire or explosion, the local fire department should be contacted immediately. The Site Manager or SSO should be prepared to brief the Officer In Charge on the situation. Advise the Officer In Charge of the location, nature, and identification of the hazardous materials on-site.

DECONTAMINATION SEQUENCE
SAFETY EQUIPMENT/MONITORING INSTRUMENTS

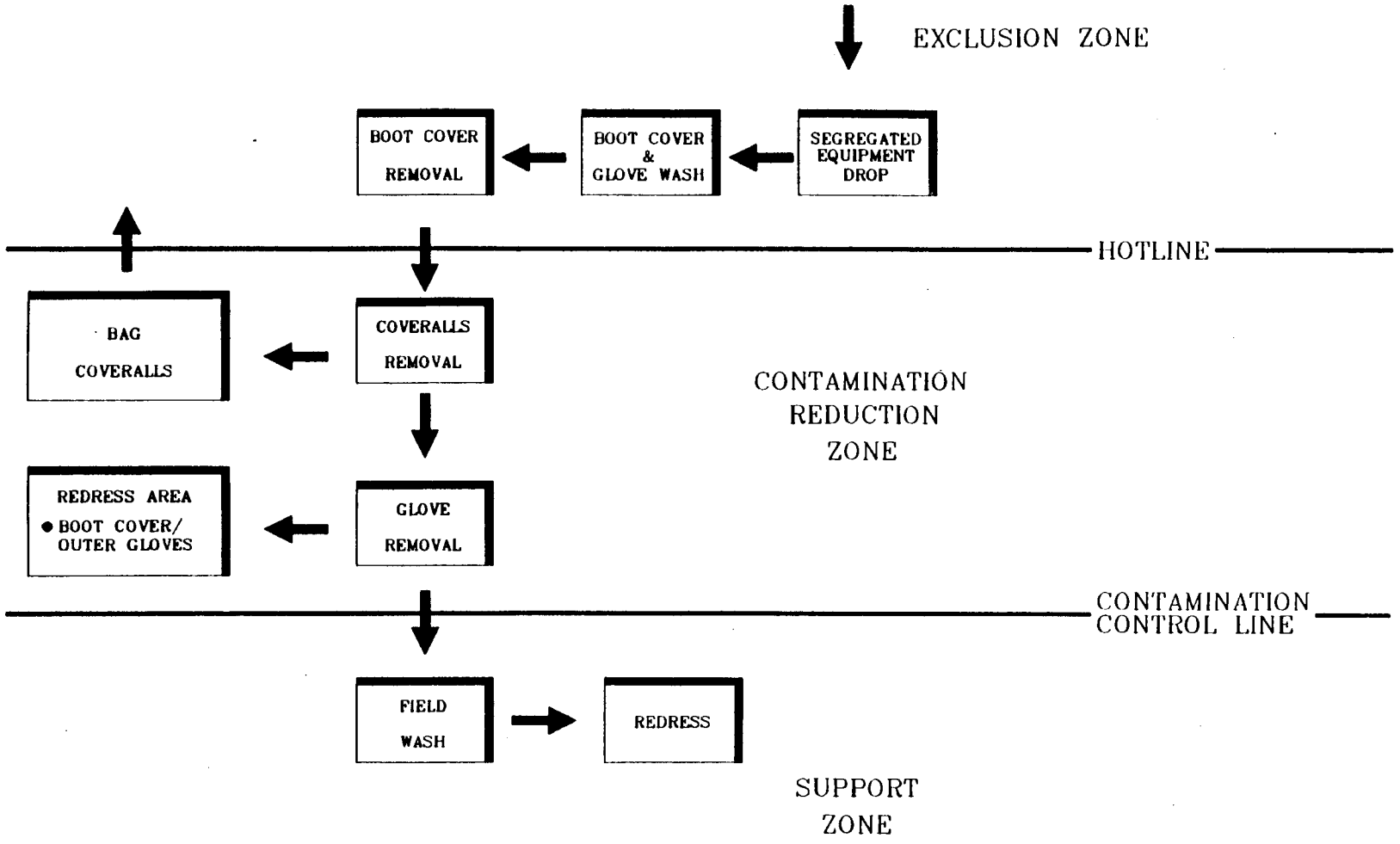


NOTE:
DO NOT USE METHANOL RINSE ON RESPIRATORS OR ANALYTICAL INSTRUMENTS

TETRA TECH, INC.

SOURCE: OCCUPATIONAL SAFETY & HEALTH MANUAL FOR HAZARDOUS WASTE SITE ACTIVITIES
NIOSH/OSHA/USCG/EPA 1985

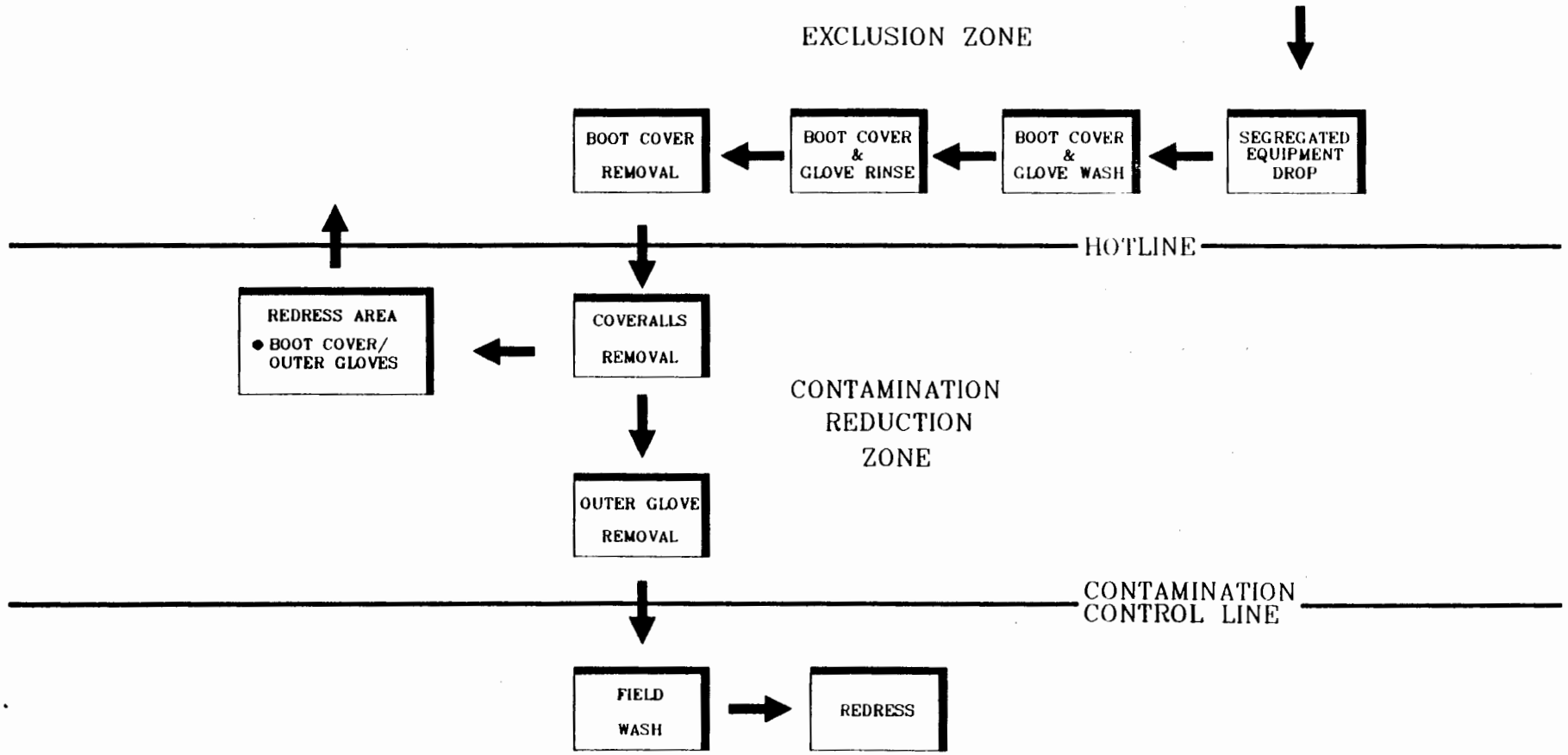
DECONTAMINATION SEQUENCE
LEVEL D PROTECTION



TETRA TECH, INC.

SOURCE: OCCUPATIONAL SAFETY & HEALTH MANUAL FOR HAZARDOUS WASTE SITE ACTIVITIES
NIOSH/OSHA/USCG/EPA 1985

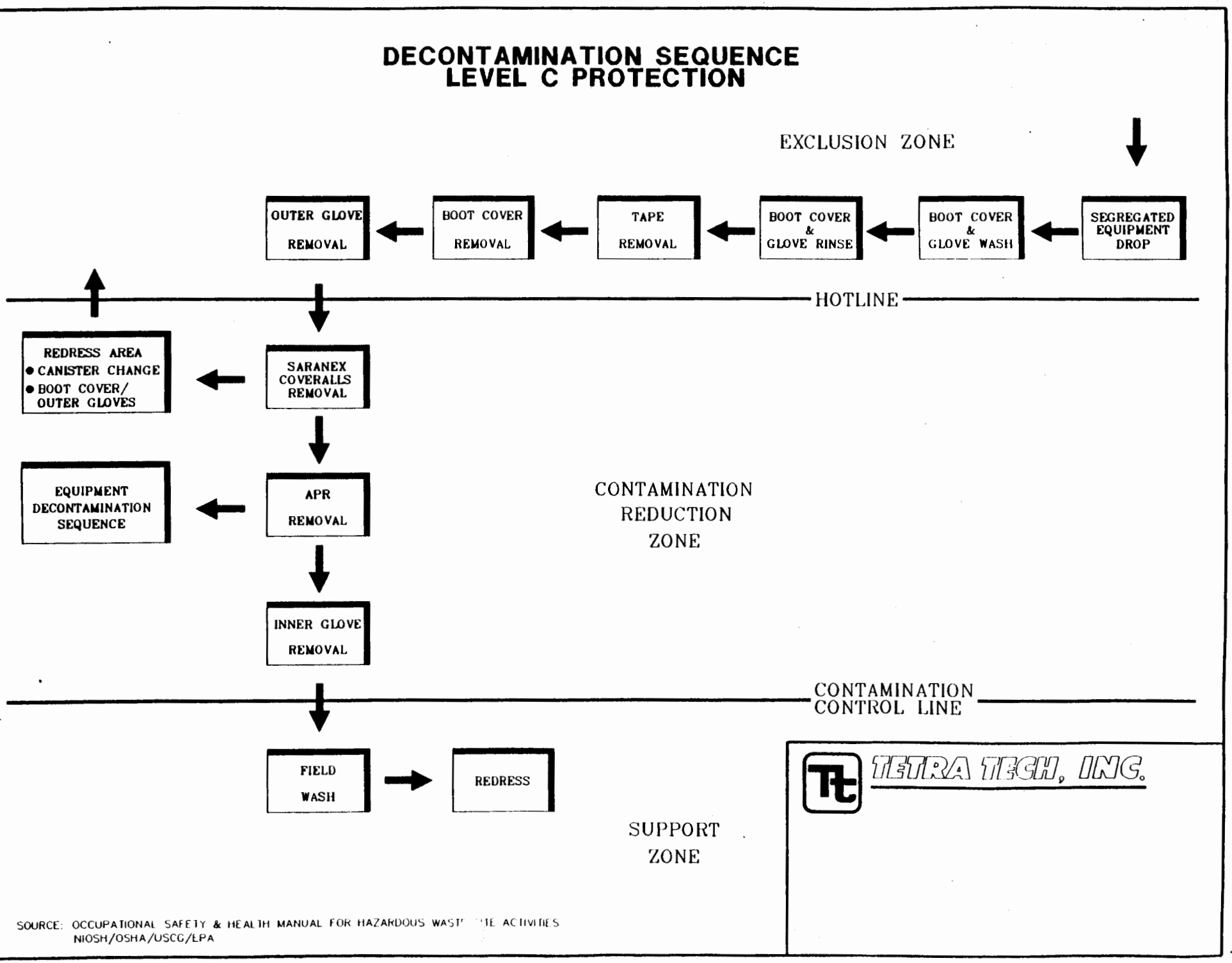
DECONTAMINATION SEQUENCE
MODIFIED LEVEL D PROTECTION



TETRA TECH, INC.

SOURCE: OCCUPATIONAL SAFETY & HEALTH MANUAL FOR HAZARDOUS WASTE SITE ACTIVITIES
NIOSH/OSHA/USCG/EPA 1985

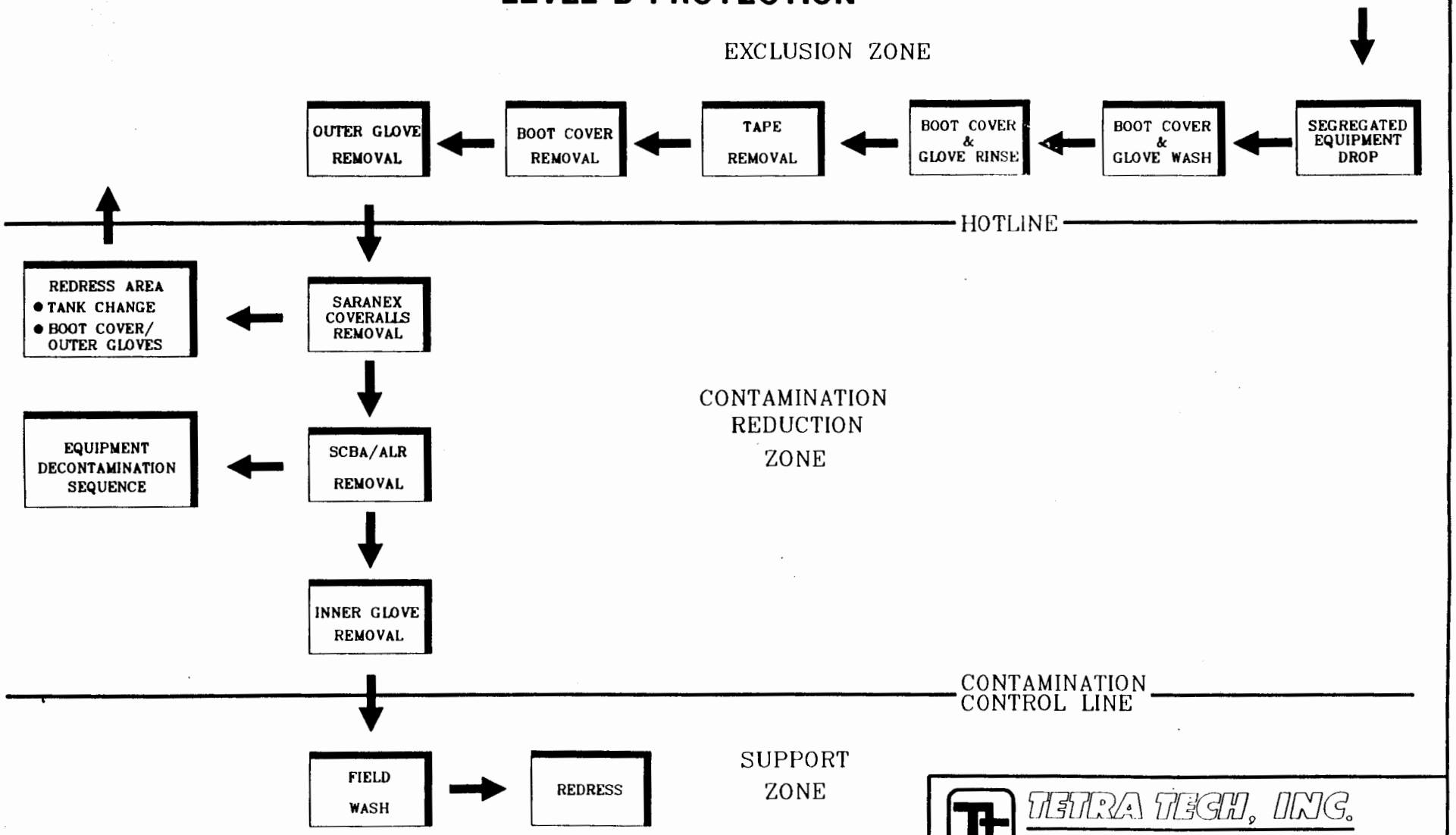
DECONTAMINATION SEQUENCE
LEVEL C PROTECTION



SOURCE: OCCUPATIONAL SAFETY & HEALTH MANUAL FOR HAZARDOUS WASTE SITE ACTIVITIES
NIOSH/OSHA/USCG/EPA

TETRA TECH, INC.

DECONTAMINATION SEQUENCE
LEVEL B PROTECTION



TETRA TECH, INC.

SOURCE: OCCUPATIONAL SAFETY & HEALTH MANUAL FOR HAZARDOUS WA[illegible]TE ACTIVITIES
NIOSH/OSHA/USCG/EPA 1985

INSERT MAP WITH ROUTE FROM SITE TO HOSPITAL

PLEASE REMOVE THIS SHEET

When directed by the SM, site personnel may use fire fighting equipment available on-site to control or extinguish the fire, and remove or isolate flammable or other hazardous materials that may contribute to the fire.

When the situation is immediately dangerous to life and health, evacuation procedures should be initiated.

Spills/Releases:

In case of a spill or leak, site personnel should:

1) Inform the site manager and SSO immediately;

2) Under the direction of the SM, locate the source of spillage and stop the flow, if it can be done safely;

3) Begin containment and recovery of the spilled materials with sorbent, if present.

Confined Spaces:

(X) No confined space entry anticipated

( ) Confined spaces may be encountered in the following locations/during the following tasks:

_____

_____

_____

_____

( ) Attached confined space entry procedures.

Emergency Notification Procedures:

The following equipment is available for use on or near the site:

Public Telephones	
Private Telephones (emergency only)	
Mobile Telephones	in vehicle
Emergency Alarms/Horns	

In the event of a site emergency, the following telephone procedure must be followed:

STEP #1 - Dial 911

Provide the following information:

- Services needed (police, fire, ambulance)
- Location of incident annd where to meet TM

The site street address is:

5100 Bainbridge Blvd
Chesapeake VA

- Nature of incident (injury/illness, fire/explosion, or spill)
- Time incident occurred
- Any action taken to correct incident
- Your name and telephone number (for any call-back)

(Note: Stay at the telephone in case the dispatcher needs to contact you for additional information. Do not hang-up the phone until the dispatcher has hung-up.)

STEP #2 - Telephone Tetra Tech WAM and/or the RHSR at the following number:

302-738-7551

If the WAM or RHSR is not available, ask for the ARCs Program Director. Relay the information you gave above and telephone number where you or the TM can be reached.

Emergency Contacts/Notification:

A. Local Resources

	Name	Telephone #
Ambulance/Rescue Squad	911	___-___-___
Local Police	Chesapeake PD	804-547-6556
State Police		___-___-___
Fire Dept.	Chesapeake FD	804-547-6495
Hospital #1	Chesapeake General	804-547 8121
Nearest Phone		___-___-___

B. Office Resources

EPA Contact	Lori Baker	215-597-3165
Nearest Tt Office	Fair fax	703-385-6000
Tt Newark, DE	302-738-7551	
M. Musetti, OHSR	302-738-7551 (W)	302-836-8856 (H)
D. Janiec, RHSR	302-738-7551 (W)	302-454-1772 ~~215-274-2000~~ (H)
P. Yuonis, WAM	302-738-7551 (W)	302-731-0295 (H)

C. Emergency Contacts

Poison Control Center	- -
National Response Center (For Environmental Emergencies Only)	800-424-8802
Center for Disease Control	404-488-4100 (24-hour)
USEPA Region III	215-597-9899 (24-hour)
CHEMTREC	800-424-9300
Federal Express - Haz. Waste Info.	901-922-1666
Bureau of Explosives, A.A. Railways	202-835-9500

Personnel Training Requirements

All Tetra Tech employees are trained in accordance with 29 CFR 1910.120. All personnel are trained in the use of air purifying respirators (APR), self-contained breathing apparatus (SCBA), and air line respirators (ALR), as well as, training in the respirators capabilities, limitations, and maintenance. As required under 29 CFR 1910.134, all Tetra Tech employees are qualitatively fit-tested prior to wearing respirators. At a minimum, qualitative fit-testing is repeated annually. Subcontractors will be required to provide documentation pertaining to their current status.

Medical Monitoring

All site personnel must maintain a current active status with respect to their employer's medical surveillance program, in order to satisfy 29 CFR 1910.120 (f). Tetra Tech field personnel have physicals updated annually, and are certified annually by a physician for respirator use. Subcontractors will be required to provide documentation pertaining to their current status.

12.0 Acknowledgement

I have read, understood, and agreed with the information set forth in this Health & Safety Plan, and will adhere the protocols specified herein.

Site Manager	Signature	Date
Site Safety Officer	Signature	Date
Field Team Member	Signature	Date
Field Team Member	Signature	Date
Field Team Member	Signature	Date
Field Team Member	Signature	Date
Field Team Member	Signature	Date

Subcontractors

Name	Signature	Date
Name	Signature	Date
Name	Signature	Date
Name	Signature	Date

Safety Report: Please return this page with the final field SHSP to the OHSR. If there were any changes made or needed for the future, the OHSR should relay these changes to the RHSR.

Site Name: _____

Charge Number: _____

Tasks Performed	Dates of Activity
_____	_____
_____	_____
_____	_____
_____	_____

Future Activity? Yes ( ) No ( ) If yes, Explain:

_____

_____

Describe if there were any changes made to the protection program.

_____

_____

_____

Summarize findings and monitoring results.

_____

_____

_____

Was the SHSP adequate? Yes ( ) No ( )
What changes can be made for future activities?

_____

_____

_____ _____

SSO Signature OHSR Signature

TETRA TECH, INC.
POST OFFICE BOX 875
NEWARK, DELAWARE 19715-0875
TELEPHONE (302) 738-7551

December 6, 1991
TCN 4222-12

Mr. Van H. White
Manager of Environmental Affairs
Huntsman Chemical Corporation
5100 Bainbridge Blvd.
Chesapeake, Virginia 23320-6502

Dear Mr. White:

SUBJECT: REQUEST FOR SITE ACCESS - Old Hoechst & Foster Site, 5100 Bainbridge Blvd., Chesapeake, VA. - CERCLIS No. VAD988196994

In response to your discussion with me on Wednesday, November 27, 1991, this is a formal request for access to Huntsman Chemical (aka. Old Hoechst & Foster) facility in Chesapeake, VA, on Thursday December 19, 1991. The purpose of this visit is to conduct a preliminary assessment of the property in order to assess the need for further action by the USEPA. The work scheduled to be performed shall consist of walking the area, observing on-going procedures, photographing (where permitted), and obtaining background information regarding waste-handling practices. Tom Modena of the Virginia Department of Waste Management was informed of our upcoming visit and may choose to accompany us.

Tetra Tech, Inc. is under contract with the United States Environmental Protection Agency (USEPA) to provide technical and management support of investigative activities at selected uncontrolled hazardous substance disposal sites. Section 104 of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) of 1980 authorizes the USEPA to respond to the release or threat of release of hazardous substances, pollutants, and contaminants into the environment. This authority includes investigations, tests and other information gathering procedures necessary to determine the existence, nature and source of such materials.

Under Contract No. 68-W8-0092, Tetra Tech, Inc. is authorized to carry out certain tasks and responsibilities pursuant to CERCLA, 42 U.S.C. 9601, et. seq., and the Superfund Amendment and Reauthorization Act of 1986 (SARA). It is in this support capacity, we have received a work assignment to perform a site investigation as outlined above.

Thank you in advance for your cooperation in this matter. If you have any questions, please feel free to call me at (302) 738-7551.

Sincerely,

Mark A. McFarland
Environmental Engineer

dab
cc: Phil Younis